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PATENT
Customer No. 22,852
Attorney Docket No. 05725.0637-00

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re Application of:)
)
David W. CANNELL et al.) Group Art Unit: 1617
)
Application No.: 09/820,954) Examiner: S.J. Sharareh
)
Filed: March 30, 2001)
) Confirmation No. 7371
For: COMPOSITIONS COMPRISING AT LEAST)
ONE AMINATED C ₅ -C ₇ SACCHARIDE)
UNIT, AND THEIR USE FOR THE)
PROTECTION AND/OR REPAIR OF)
KERATINOUS FIBERS)

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

REPLY BRIEF UNDER 37 C.F.R. § 41.41

Pursuant to 37 C.F.R. § 41.41, Appellants present the Reply to the Examiner's Answer dated May 4, 2006. Appellants do not believe that a fee is due in connection with the filing of this paper. However, if any fees are required in connection with the filing of this paper, Appellants request that the required fees be charged to Deposit Account No. 06-0916.

REMARKS

I. Evidence Appendix

Appellants thank the Examiner for clarification of the Merck Index reference in the Answer, page 3. Appellants agree that Merck Index 11th edition (1989), instead of 7th edition, pages 751-752, is the sole evidence considered in record to show the structure of hyaluronic acid.

II. Status of Rejections

In response to the Appeal Brief filed February 16, 2006, the Examiner has maintained the rejection of claims 78 and 79 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,866,142 to Riordan ("*Riordan*"). Answer, page 3.

III. Response to Examiner's Arguments in the Answer

Appellants maintain that claims 78 and 79 are not anticipated by *Riordan* for at least the following reasons.

A. Claim 78 is not anticipated by *Riordan*

The Examiner argues that the term "glucosamine" in claim 78 should include glucosamine itself, the salts thereof, and the derivatives thereof (See Answer, pages 4-5). Even assuming such an interpretation is correct, *Riordan* does not anticipate claim 78 because *Riordan* does not expressly or inherently teach every element of claim 78.

Specifically, *Riordan* does not teach the at least one additional sugar, which is chosen from monosaccharides and oligosaccharides, as recited in claim 78. Contrary to the Examiner's allegation in the Answer, page 6, hyaluronic acid is a polysaccharide, not an oligosaccharide.

The originally-filed specification defines the term “oligosaccharide” as “compounds generally comprising from two to ten monosaccharide units, which may be identical or different, bonded together.” Specification, page 7, lines 8-10. The originally-filed specification also defines the term “polysaccharide” as “compounds generally comprising greater than ten monosaccharide units, which may be identical or different, bonded together.” *Id.* at lines 11-13. The disclosure of the originally-filed specification cited by the Examiner in the Answer, page 6, i.e., “page 19, line 22-page 20, line 5,” does not support the Examiner’s allegation that hyaluronic acid is an oligosaccharide.

Specifically, as indicated in Merck Index, 11th edition, page 751, the molecular weight of hyaluronic acid ranges from 50,000 to 8×10^6 . Also as shown by the structure provided in the Merck Index, 11th edition, page 752, the molecular weight of each monosaccharide unit of hyaluronic acid is less than 5,000. Therefore, even a hyaluronic acid with a molecular weight of 50,000 contains more than ten monosaccharide units. Accordingly, hyaluronic acid is not an oligosaccharide, but a polysaccharide.

For this reason alone, claim 78 is not anticipated by *Riordan* and Appellants respectfully request this rejection be reversed and withdrawn.

B. Claim 79 is not anticipated by *Riordan*

Riordan does not anticipate claim 79 either, because *Riordan* does not expressly or inherently teach every element of claim 79. Specifically, *Riordan* does not teach the composition as recited in claim 79, comprising both (1) the at least one compound, which is chosen from polysaccharides, and (2) the at least one additional sugar, which is different from (1) the at least one compound, and is unsubstituted.”

Even assuming hyaluronic acid, as a whole, is an unsubstituted sugar and meets the second element of claim 79 as alleged by the Examiner, because N-acetyl-D-glucosamine is clearly not a polysaccharide, N-acetyl-D-glucosamine does not fall into the scope of the first element of claim 79. Therefore, for this additional reason, the composition disclosed in *Riodan* does not anticipate claim 79. Accordingly, Appellants respectfully request this rejection be reversed and withdrawn.

IV. Conclusion

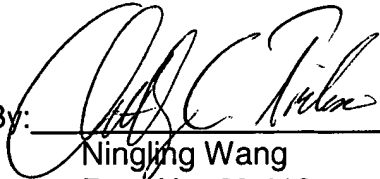
In view of the foregoing, Appellants respectfully request that the § 102(b) rejection be reversed and withdrawn.

Please grant any extensions of time required to enter this Reply Brief and charge any additional required fees to our Deposit Account No. 06-0916.

Respectfully submitted,

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Dated: July 5, 2006

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